Trail Management 101

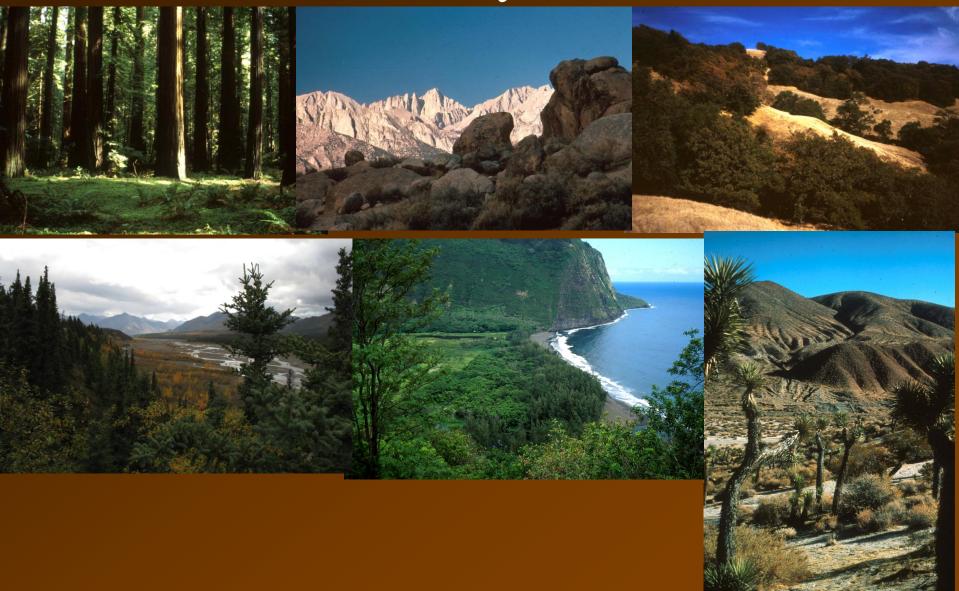
Course Objectives

- Learn the process for :
- Classifying and prioritizing trails
- Developing standards and specifications for trail work
- Inventorying and assessing trails
- Quantifying trail maintenance and rehabilitation workload and cost
- Prioritizing and scheduling trail projects
- Developing tool, equipment and material inventories

Course Objectives

- Securing and developing labor sources
- Evaluating and monitoring trail systems
- Continually adapting and improving your trail program

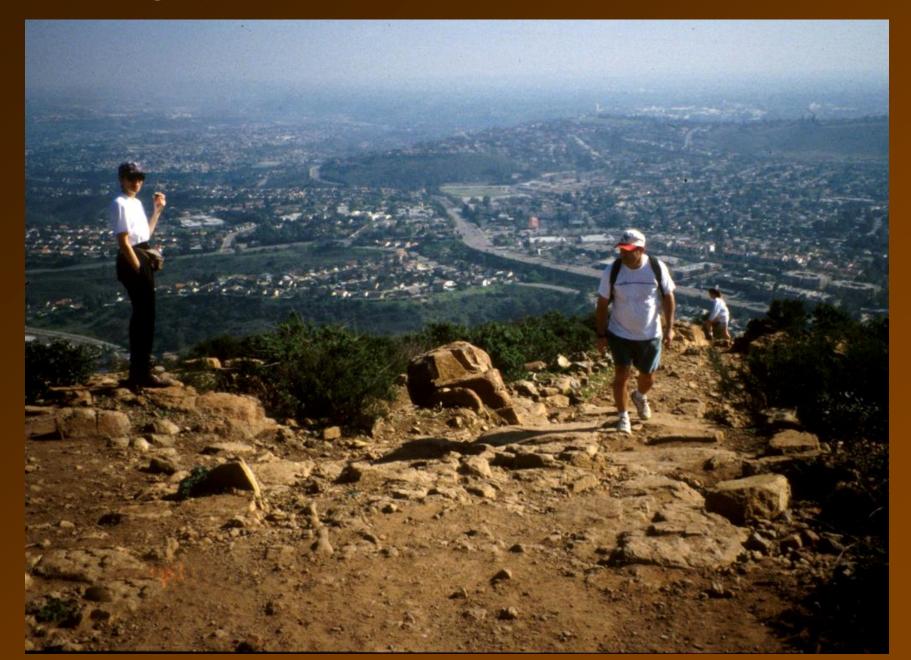
Trails traverse a wide variety of landforms and ecosystems



Trails are designed and constructed to meet the needs of different user groups



Urban hikers



Backpackers



Equestrians



Mountain bikers



Multiuse



Off Highway Vehicles



Trail systems also include a variety of support facilities

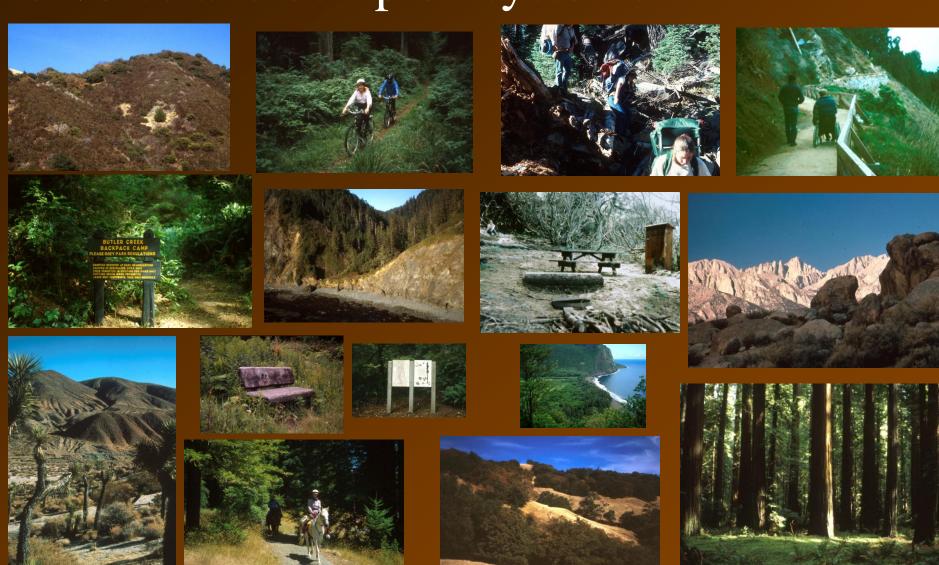








How can we organize and manage such diverse and complex systems?



The organization of a trail system begins with classification of each trail

A trail matrix is used to evaluate each trail, identify its classification and establish its comparative rank or importance within the trail system

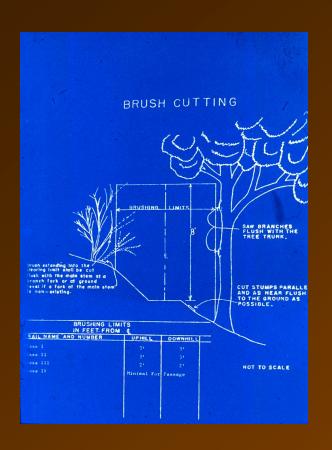
TRAIL NAME:												
TRAIL CLASSIFICATION MAT	TRAIL CLASSIFICATION MATRIX											
CRITERIA	Point Values	Rating										
1. Accessible	25											
2. Interpretive	15											
Within Visitor Use Facility	15											
Equestrian and Bike (Multi Use)	15											
Adjacent to Visitor Use Facility												
0-1/4 mile	12											
1/4 - 1 mile	8											
1-2 mile	4											
2 or more miles	0											
Connection of Visitor Use Facilities	5											
7. Parking Access	5											
Destination Oriented												
0 - 1 mile	3											
1 -3 miles	2											
3 + miles	1											
Connection with Other Agency Trail	+3 - +5											
10. Special Use or Access	1											
11. Dead End Trail	0 or -3											
12. Loop or Connecting Trail	+1 - +3											
13. Fragile Environment												
Protected by lessening use	-13											
Protected by upgrading	+1 - +3											
14. Safety Factors												
Encourage less use by not Providing Improvements	-15											
b. Provide and maintain improvements	+0 - +5											
15. Staff Determined Use Patterns												
Little or no use	-13											
Higher use	+1 - +3											
	TOTALS											
I CLASSIFICATION: II I = 30+ II = 19 - 29 III = 10 - 18 IV = 0 - 9												

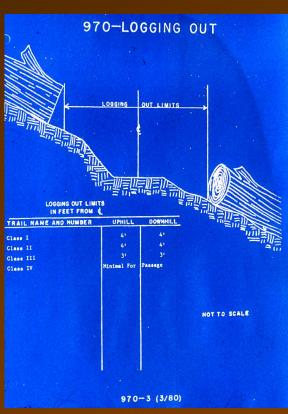
TRAIL NAME:	

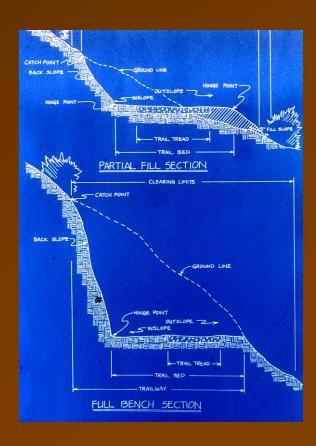
TRAIL CLASSIFICATION MATRIX

CDITEDIA	Daint Value	Detino
CRITERIA	Point Values	Rating
1. Accessible	25	
2. Interpretive	15	
Within Visitor Use Facility	15	
Equestrian and Bike (Multi Use)	15	
Adjacent to Visitor Use Facility		
0-1/4 mile	12	
1/4 - 1 mile	8	
1-2 mile	4	
2 or more miles	0	
Connection of Visitor Use Facilities	5	
7. Parking Access	5	
Destination Oriented		
0 - 1 mile	3	
1 -3 miles	2	
3 + miles	1	
Connection with Other Agency Trail	+3 - +5	
10. Special Use or Access	1	
11. Dead End Trail	0 or -3	
12. Loop or Connecting Trail	+1 - +3	
13. Fragile Environment		
Protected by lessening use	-13	
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	TOTALS	
CLASSIFICATION: II		
CLASSIFICATION: II I = 30+		
I = 30+ II = 19 - 29		
II = 19 - 29 III = 10 - 18		
III = 10 - 18 IV = 0 - 9		
17 - 0 - 9		

A set of design and construction standards is developed for each trail class.







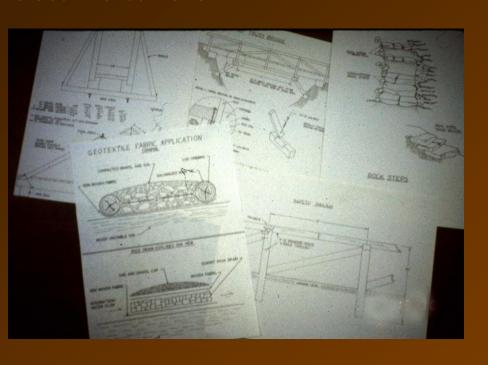
Specific design standards are also developed for the various user group trails







Once design and construction standards are developed the trail system can be inventoried and assessed using those standards





This can be accomplished by developing trail logs



Trail logs identify and quantify all trail features as well as trail deficiencies and their corrective prescriptions





When a trail is being assessed you must also determine if it is:



Not sustainable but maintainable

BEFORE (note yellow star for reference point)





NOW (note yellow star in same place for reference point)

Not sustainable or maintainable



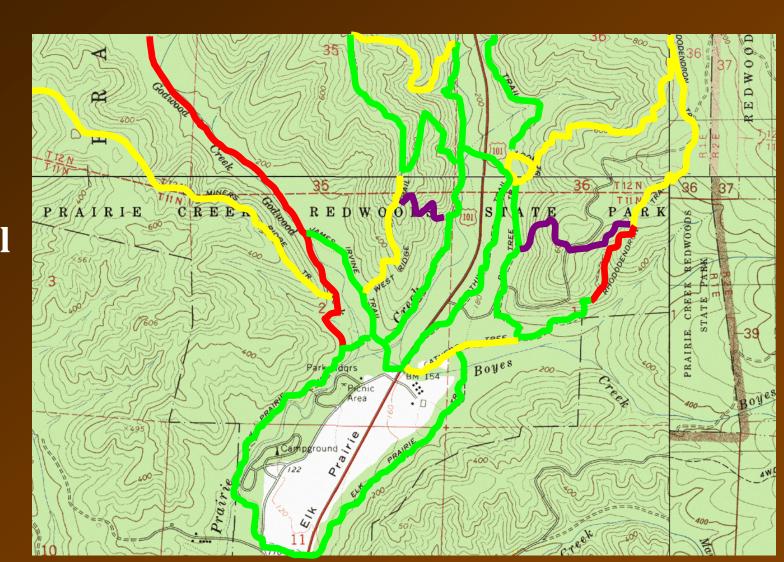
You must also determine the cause of the trails deficiencies

- Layout & Design
- Construction
- Maintenance

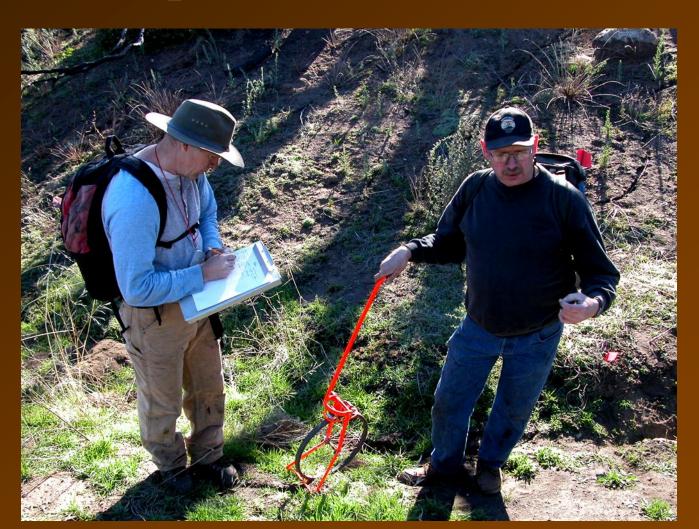


Once each trail is assessed it can be determined if the trail requires:

- Maint.
- · Recon.
- Reroute
- Removal



Prescriptions for correcting theses deficiencies can be identified on the trail log or developed at a later date



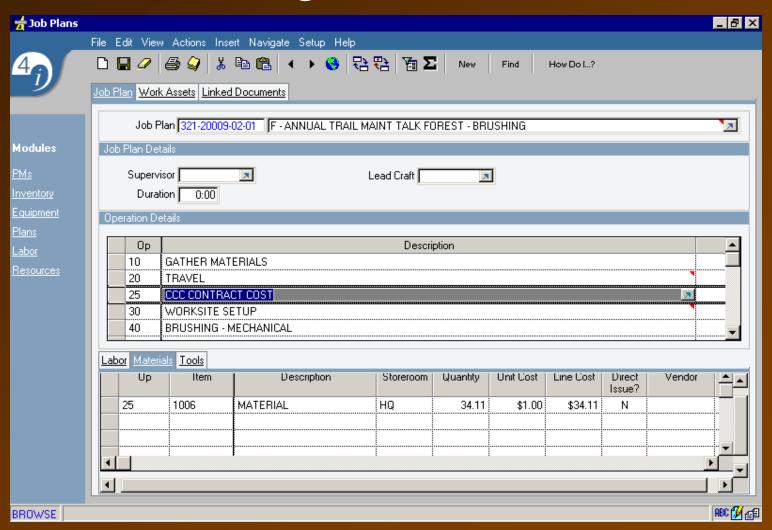
The data collected from these inventories can then be sorted and used in electronic spreadsheets to calculate trail maintenance

workload and cost

SCHEDULE FOR MAINTENANCE OR					НС	US	EK	EEF	ing						
			FEET	MI	۱۸	/IDT	ъ			_					
NAME OF FACILITY		Overlook	363	0.1	,,	3		FA	\CILI	TY NO).	123-F	-2-03-	1-002	
		DAILY TO ANNUAL CYCLI	F					2 T	0.5	YEAR	R CY	OLE		PERSON	AL SERVICES
		PERSON HOURS		RLY TOTAL	2	3	4	5		XT.3 F			DTAL	Littoore	PERSON
JOB DESCRIPTION		DAILY TO ANNUAL	PH	MATL		YR	YR	YR	SC	HEDUL	.ED	PH	MATL	Class	HOURS
Safety Inspection 123-20001-01-01		Feet Divided By 2 mile per Hour Hiking time or 10560 feet	0.03											PMS	0.03
5002															
Yearly Brushing 123-20009-02-01	1	Feet Divided by 500 feet per person ho year cycle between brushing		Contract \$10.62		CC	Î	Con	tract	\$13.00	per h	our			
5005		Hiking and Travel Time	0.09						Pla	anning a	and Su	.pervisor	Hours	PMW II	N 12
Slough and Berm Maintenance 123-20009-03-01		Feet Divided by 75 feet per person hou year cycle Hiking and Travel Time	0.97 0.12	Contract \$14.16		cc	Ì	Con		\$13.00			110010		0.12
5006									Pla	anning a	and Su	pervisor	Hours	PMW II	0.16
Down Tree Removal	_	Number of Down Trees from trail log divided by trail Age Trail Age													
5008	0	Yearly Average of Down Trees times average of 1 hour per tree	0.00	Contract \$0.00		cc		Con		\$13.00	ľ	1			
Miscelleanous Logging		Hiking and Travel Time	0.00		<u> </u>				Pl	anning a	and Su	pervisor	Hours	PMW II	0.00
Out and Brushing Supplies	\$1.58	Misc clearing and brushing supplies and equipment. 1 brush blade per mile plus saw chain and fuel.		\$1.58											
Trail Reroute and Reconstruction 123-20015-01-03	4	1% of trail tread on average feet yearly divided by 7 feet per person hour equals hours annually Hiking and Travel Time	0.52 0.06	Contract \$7.58		cc		Con	tract	\$13.00	per h	our			
5020									Pla	l anning a	l and Su	 Jpervisor	l Hours	PWW II	0.09
ANNUAL TOTAL MATERIAL COST ALL PAGES: \$117.19						_	_	_				HOUR			0.66
TOTAL EQUIPMENT COSTS- FROM PAGE 4 \$0					1 -	CHE		E 9Y: .	meb			-	_	DATE:	2/20/02

Trail 473 Data Sheet				Trail Data Entry Area		TAB 473 #1	TAB 473 #2	TAB 473 #3	TAB 473 #4
Park or Sector:	DENIDOW I A	VE STATE DE	CDE		ared By:		meh	meh	11.0 110 111
	BENBUW LA	KE STATE KE	CRE	ATION AREA FIED		2/20/02	2/20/02	2/20/02	
Park or Sector Budget					Date:	2/20/02	2/20/02	2/20/02	
				_					
Materials and Contract:	\$2,509.91				ail Name:		Pioneer	Pratt Mill	
Equipment Rental:	\$0.00				ark Unit:	123	123	123	
				Classificatio	n Score:	1	1	1	
Total Trail Footage	11816			Facility	Number:	123-F-2-03-1-002	123-F-2-03-1-001	123-F-2-04-1-001	
Personal Hours PMS	1.12			Trail L	ength Ft:	363	4245	7208	0
Personal Hours PMW II	20.82			Trail Width in Feet (d	esigned)	3	3	3	3
				Trail Age Years(never less	than 1):	20	20	20	20
Parkwide Trails Facility no:	123-F-2-03-1-	003		Material and Contra	act Total:	\$117.19	\$935.85	\$1,456.86	\$0.00
				Equipment Ren	tal Total:	\$0	\$0	\$0	\$0
				Personal Hor	urs PMS:	0.03	0.40	0.68	0.00
				Personal Hours	s PMW II:	0.62	8.08	12.12	0.00
Material and Labor Cost She	et			Equipment Item #1 page 1					
<u>ltem</u>	Unit	Cost		Equipment Item Needing to	be rented				
CCC Contract Labor Cost	hour	\$13.00	w	hen Needed (fall, winter, spring					
Brush Blades	each	\$23.00		Cost for Equipm		\$0.00	\$0.00	\$0.00	\$0.00
Saw Chain	foot	\$0.80		Equipment Item #2 page 1					
Gravel	cubic yard	\$25.00		Equipment Item Needing to	be rented				
Wood Step Material	board foot	\$1.80	w	hen Needed (fall, winter, spring					
Wood Retaining Wall Material	board foot	\$2.00		Cost for Equipm	ent Rental	\$0.00	\$0.00	\$0.00	\$0.00
5/8" Rebar	lineal foot	\$0.25		Equipment Item #1 page 2					
Hand Railing Material	board foot	\$1.80		Equipment Item Needing to	be rented				
Split Rails	each	\$22.00	w	hen Needed (fall, winter, spring	g, summer)				
Puncheon Replacement Costs	lineal foot	\$50.00		Cost for Equipm	ent Rental	\$0.00	\$0.00	\$0.00	\$0.00
Bridge Replacement Costs	lineal foot	\$435.00		Equipment Item #2 page 2					
Laborer	hour	\$15.20		Equipment Item Needing to	be rented				
Park Maintenance Worker I	hour	\$16.58	w	hen Needed (fall, winter, spring					
Park Maintenance Worker II	hour	\$19.66		Cost for Equipm	ent Rental	\$0.00	\$0.00	\$0.00	\$0.00
				Trail Log Inventory	Unit of				
Park Maintenance Supervisor	hour	\$20.26		Totals	Measure				
Type of Contractor, ie CCC				Brushing Cycle					
CDF, Private, CYA ect		CCC		Slough and Berm	years	1	1	1	1
Geotextile Wall Fabric	square foot	\$0.08		Maintenance Cycle	years	5	5	5	5
Geolexine vvaii i abiic	square root	\$0.00		mannenance oyore	years	5	5	5	5
Cellular Wall Fabric	cubic foot	\$2.75		Down Trees	each		13	20	
				Gravel Surfacing ie Turnpike					
Drain Lens Quarry Rock 3"-8"	cubic foot	\$1.00		and Causeway	lineal feet			525	
CMP Culvert 18"	lineal foot	\$7.50							
Seasonal Pipe Bridge	each	\$850.00		Standard Wood Steps	each				
Trail Bench	each	\$750.00		Interlocking - Single	each				
4WD Trail Tractor	hour	\$15.00		Interlocking - Double					
Motorized Wheelbarrow	hour	\$2.50		Waterbar - wood	each				
450 Trail Dozer	hour	\$19.00		Cable Steps					
Tilt Trailer	hour	\$5.00		Wood Retaining Wall (adbutments, tumpike wall, full & partial	square feet		314	459	
				crib step retainers)					
				Standard Wood Rails	lineal feet	50			
				Split Rail Fences					
				Mortar Rock Safety Walls	cubic feet				
				Puncheons	each				
				Puncheon Maintenance	lineal feet				
				- unoncon manneriance	rour root				

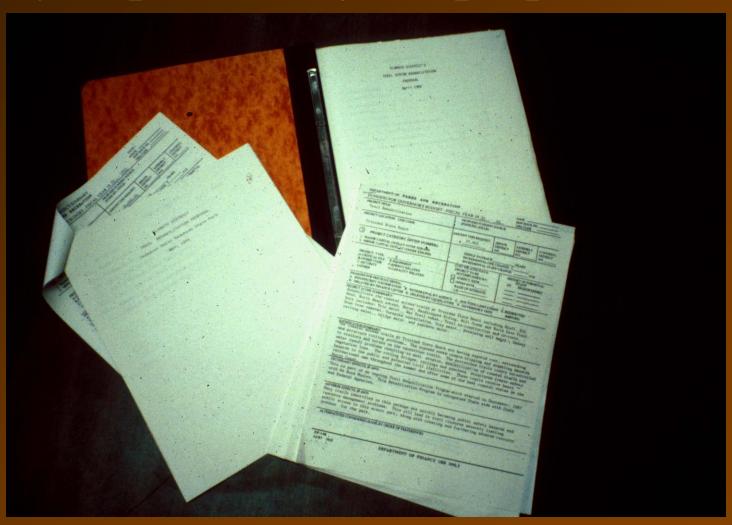
This data can be used in Maximo or other data base programs to justify annual trail maintenance budgets



These inventories can also be used to quantify trail rehabilitation cost

						Т	RAIL:	James Irvine	
					PER UNIT			LABOR	MATERIAL
CONSTRUCTION ACTIVITY	TOTALS	UNIT			COST	L		COST	COST
Helicopter Rental	0		hrs	@	\$8,000.00	=			\$0.00
Mule Packing Contract	0		day	@	\$125.00	=			\$0.00
Spike Camps									
If Spike Camp Put "1" in Box If No Spike Camp Put "2" in Box	1								
Spike Camp Move-in Move-out Cost	2.00		ea	@	\$750.00	=			\$1,500.00
Spike Camp Overhead Costs	17.41		weeks	@	\$750.00	=			\$13,056.30
Cook Contract	4.35		month	@	\$4,800.00	=			\$20,890.08
Vehicle Cost (Crew Van/CCV)	4		month	@	\$600.00	=			\$2,611.26
Trail Crew Management Information								tax on materials	\$4,654.23
Crew Size (number of workers)	10								
								Labor	Materials
Work Day Hours (8 or 10 hour days)	8							\$83,888.00	\$71,461.84
					Hikin	g 1	Time	\$5,243.00	
Average Daily Hiking Time on Project					Total	La	bor	\$89,131.00	
Display in increments of 15 minutes at .25	0.50				Supervision	n (Cost		\$13,369.65
hours (ex .25, .50, .75, 1.00, 1.25, 1.50)		То	ol & Eq	uip	ment Replac	en	nent		\$8,698.12
				Щ			4007		A00 075 50
	Adminis	strative	Overhe	ead	Percentage		12%		\$20,875.50
						L			
			TOTA	\L	PROJECT	С	OST	\$	203,536.11

This data can be used to secure trail rehabilitation funds through capital outlay request and grant proposals



Trail deficiencies identified through inspections and staff input are then prioritized. Prioritizing trail projects should be an objective process.

W. L.				1 - 1	
RO	ADS, TRAILS	AND RESOURCE N	MAINTENAN	CE SECTION	
		PROJECT REQUES			
		The state of the s			
1. Unit:2.	Submitted By:_	3. Suj	pervisor's. Initia	als:4. Date:	MAL
5. Work Category:	Roads	Heavy Equipment	Trails	Resource Maintenance	getti d
6. Nature of Work:	Health & Sa	afety Resource Pr	rotection P	reservation of Investment	
improvement)	Visitor Cor	nvenience New In	nprovement (F	unding source for new	-0
7. Primary Project Su	pervisor, if oth	er than R.T.R			
8. Project Description	n.				
8. Project Description		111			
				The second second second	
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			- '	1 -	
9. Equipment Requi	rements:		•		wh.
- (-					
to T I D					
10. Tool Requirement				TO SEE SHEET DOOR	- 19
11 Material Paguire	ments:				
11. Material Require	ments.				
					~
12. Crew Requireme	ints.				
12 Projected Project	Stort Date:				
13. Projected Projec	t Start Date: _			The second	100
14. Estimated Project	ct Duration:				



Health and safety







Resource protection





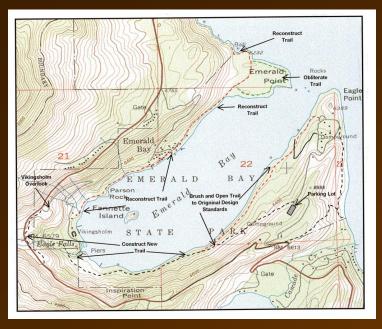
Preservation of investment



Visitor convenience



New trail development









For each of these categories points are assigned based on the severity of the

pro	hĺ	lem.
Pro	נט	

		Trail Pro	oject Selec	tion Matr	ix			
		ing Deficie						
	(select	all that apply	and rank it on					
Trail Project		Protection	Preservation of Investment 1-7	Visitor Conveinenc e1-5	New Trail Construction 1-3	Total Matrix Points	Trail Class	Trail Class Points
West Ridge	5	6		4		15	3	19
Ten Taypo	8	10	2			20	3	18
Superintendent					2	2	2	22
South Fork	8	7				15	3	14
Rhododendron	5	6	3	2		16	3	18
Revelation			7			7	1	42
Ossagon	5	9				14	2	20
Little Creek		8		2		10	4	5
James Irvine	10	5	5			20	1	32
Foothill	10	6	4			20	2	25
Elk Prairie	8	7	5			20	1	38
Clintonia			6	2		8	3	15
Cathedral Trees			7	4		11	2	21
Brown Creek	2	6	2			10	2	23

		Trail Pr	oject Selec	tion Matri	ix (Sorted)		
	Qualify	ing Deficie	ncv					
	_	_	and rank it on	the severity so	ale shown)			
Trail Project	Visitor	Resource	Preservation of Investment 1-7	Visitor Conveinenc e1-5	New Trail Construction 1-3	Total Matrix Points	Trail Class	Trail Class Points
Elk Prairie	8	7	5			20	1	38
James Irvine	10	5	5			20	1	32
Foothill	10	6	4			20	2	25
Ten Taypo	8	10	2			20	3	18
Rhododendron	5	6	3	2		16	3	18
West Ridge	5	6		4		15	3	19
South Fork	8	7				15	3	14
Ossagon	5	9				14	2	20
Cathedral Trees			7	4		11	2	21
Brown Creek	2	6	2			10	2	23
Little Creek		8		2		10	4	5
Clintonia			6	2		8	3	15
Revelation			7			7	1	42
Superintendent					2	2	2	22

Once the trail projects are prioritized they can be scheduled

NORTH COAST F	REDWOO	DS	S D	IS.	ΓR	IC.	Т					Ţ	Ţ				Ţ				Ţ							Ţ							Γ				
ROADS TRAILS & RE	SOURCE M	AIN	ITE	NAN	ICE	SE	EC.	ΤΙΟ	N																													+	
TRAIL PROJECTS NORT	2006/07		k4C	WTH	,		+	+				+	+	+		-	+	+	+	H	+	+	+			-	+	+	+		-	-	+	+	+	\vdash	+	+	-
TRAIL PROJECTS NORTH	2000/01												١.							Η.			+			\vdash	\dashv	٦.			-	\dashv		_	+			+	-
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PROJECT	EADPERSO		5	12 13 18 23		5	9 10	23	30	7	18	21	* 1	111	18	•	1 .	8 1		1	8 1	9 26	29	5	12	19	•	3		17 21							12 1 16 :		
irvine trail reroute	Klinger	ń							i	ij.	Ň					i	Ĭ			Ň				Ň	10	-3	┪	÷			-	7	+10	+	+-	H	<u></u>	┿	÷
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prairie creek trail puncheons	TBA	\vdash	\dashv	+	+	\vdash	+	+	\vdash	Н	—	۳,		+	\vdash	\dashv	+	+	+	\vdash	+	+	+	\vdash	Н	\vdash	\dashv	\dashv	\dashv	\neg	\dashv	\dashv	+	+	+	Н	\vdash	+	_
crea trail bridge replacement		\vdash	\dashv	+	+	\vdash	+	+	+	Н	\vdash	┪	٠,			\dashv	+	+	+	₩	+	+	+	\vdash	Н	\vdash	\dashv	+	\dashv	\neg	\dashv	\dashv	+	+	+	Н	\vdash	+	-
old growth log outs sector wide		\vdash	\dashv	+	+	\vdash	+	+	+	Н	\vdash	+	-		₩	\dashv	+	+	+	H	+	+	\vdash	\vdash	Н	\vdash	\dashv	+	\dashv	\dashv	\dashv	\dashv	+	+	+	Н	\vdash	+	-
del norte ouncheon	TBA	\vdash	\dashv	+	+	\vdash	+	+	+	Н	\vdash	+	+	+			+	+	+	Н	+	+	\vdash	\vdash	Н	\vdash	\dashv	+	\dashv	\dashv	\dashv	\dashv	+	+	+	Н	\vdash	+	-
trestle loop bridge	ТВА	\vdash	\dashv	+	+	\vdash	+	+	\vdash	Н	\vdash	+	+	+	H	-				H	+	+	+	\vdash	Н	\vdash	\dashv	+	\dashv	\dashv	\dashv	\dashv	+	┿	+	\vdash	+	+	-
college core steps	TBA	\vdash	\dashv	+	+	\vdash	+	+	\vdash	Н	\vdash	+	+	+	Н	-	-	-		₩				\vdash	Н	\vdash	\dashv	+	\dashv	\dashv	\dashv	\dashv	+	+	+	Н	+	+	-
wedding rock trail	ТВА	\vdash	\dashv	+	+	₩	+	+	+	Н	\vdash	+	+	+	↤	\dashv	+	+	+	-	-	-	•		Н	\vdash	\dashv	+	\dashv	\dashv	\dashv	\dashv	+	+	+	Н	+	+	-
acquisition road brushing	ТВА	\vdash	\dashv	+	+	₩	+	+	┰	Н	\vdash	+	+	+	↤	\dashv	+	+	+	₩	+	+	-				\dashv	+	\dashv	\dashv	\dashv	\dashv	+	┿	+	Н	+	+	-
stone lagoon brushing	ТВА	\vdash	\dashv	+	+	₩	+	+	\vdash	Н	\vdash	+	+	+	↤	\dashv	+	+	+	₩	+	+	₩	\vdash	-	-							+	┿	+	Н	+	+	-
seasonal brushinh north	ТВА	\vdash	\rightarrow	+	+	₩	+	+	-	Н	\vdash	+	+	+	₩	\dashv	+	+	+	₩	+	+	+	\vdash	Н								+	+	+	\vdash	+	+	_
seasonal brushing south	ТВА	\vdash	\rightarrow	+	+	₩	+	+	+	Н	\vdash	+	+	+	₩	\dashv	+	+	+	₩	+	+	\vdash	\vdash	Н	-	-	-	-	-	-	۳,		+	+	Н	+	+	-
install seasonal pipe bridges	TBA	\vdash	\rightarrow	+	+	₩	+	+	+	Н	\vdash	+	+	+	₩	\dashv	+	+	+	₩	+	+	+	\vdash	Н	\vdash	\dashv	+	\dashv	\rightarrow	\dashv	-	۰.		_	\vdash	+	+	-
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The scheduling of trail projects must account for a number of variables

Visitor use patterns



Weather











Soil moisture conditions

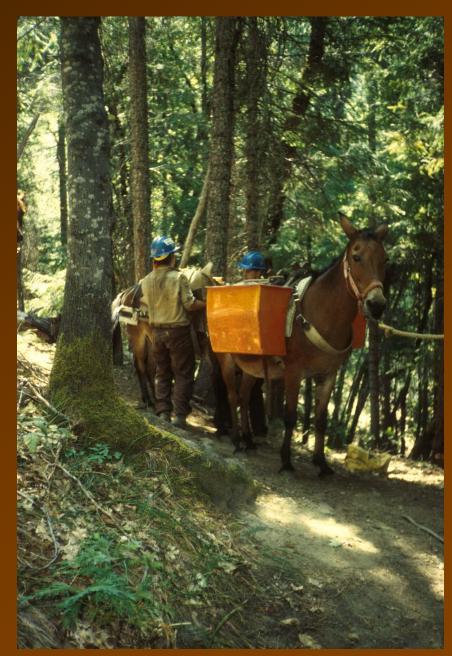




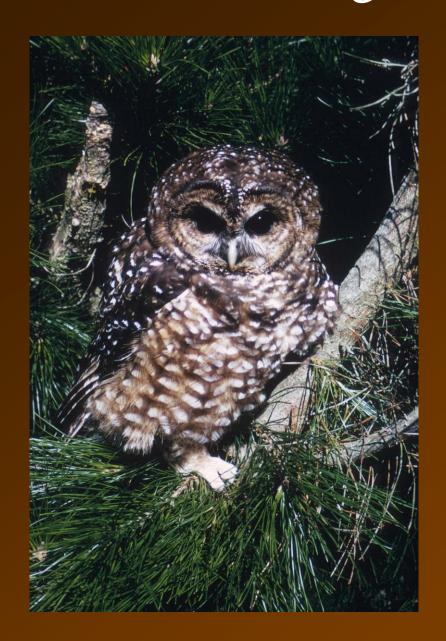
Project logistics and access

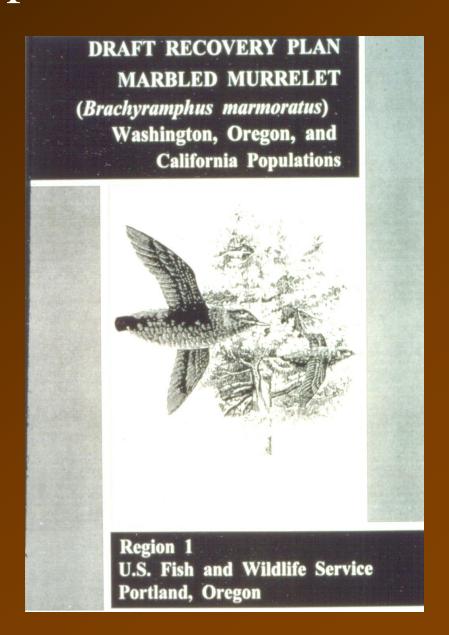






Rare and endangered species restrictions





Labor source availability









Matching project difficulty with the skill level of labor sources









Meeting crew development and training needs

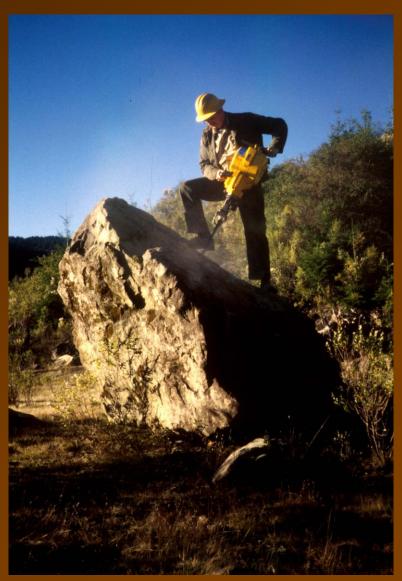




Equipment and specialized tool support must also be scheduled







Materials and tools need to be secured in advance of the project start







Skilled and experience supervision is needed to provide project organization and efficiency, skill development and quality control





Completed trail projects are inspected and inventoried







Revise trail logs and maintenance budget information

SCHEDUI	E FOR	MAINTENANCE .		OR	НС	ous	EK	EEF	PING						
			FEET	MI	W	VIDT	ТН								
NAME OF FACILITY		Overlook	363	0.1		3	_	F	ACILI	ITY NC).	123-F	-2-03-	1-002	
								2 7		V/T A I	201/	21.5			
		DAILY TO ANNUAL CYCLE PERSON HOURS		RLY TOTAL	2	3	4	5		YEAF			DTAL	PERSON	AL SERVICE: PERSON
JOB DESCRIPTION		DAILY TO ANNUAL	PH	MATL	1	I -	1 -	YR		HEDUL			MATL	Class	HOURS
Safety Inspection	363	Feet Divided By 2 mile per Hour	0.03	1007112										PMS	0.03
123-20001-01-01		Hiking time or 10560 feet													
5002															
V 1 5 1:	000		0.70			000					L.,				
Yearly Brushing 123-20009-02-01		Feet Divided by 500 feet per person hou year cycle between brushing	r 0.73	Contract \$10.62		CCC	ĺ	Con	tract	\$13.00	per n	our 			
120 2000 02 0		Hiking and Travel Time	0.09	*											
5005									DI-	onnina s	nd Si	 .ipervison	Hours	DAMA/ II	0.12
Slough and Berm	363	Feet Divided by 75 feet per person hour	0.97	Contract		CCC	5	Con		\$13.00			lilouis	F IVIVV II	0.12
Maintenance	5	year cycle		\$14.16							ľ				
123-20009-03-01		Hiking and Travel Time	0.12												
5006															
Down Tree Removal		Number of Bosse Transferre							Pla	anning a	ind Su	ipervison	Hours	PMW II	0.16
Down free Removal	U	Number of Down Trees from trail log divided by trail Age													
123-20009-04-01		Trail Age													
5008	Ü	Yearly Average of Down Trees times average of 1 hour per tree	0.00	Contract \$0.00		CCC	C I	Con	tract	\$13.00	per h	our 			
		Hiking and Travel Time	0.00	\$0.00					Pla	ı anning a	I and Su	ı ıpervison	Hours	PMW II	0.00
Miscelleanous Logging Out and Brushing		Misc clearing and brushing		\$1.58											
Supplies	\$1.58	supplies and equipment. 1 brush blade per mile plus saw chain and fuel.		φ1.3d											
Trail Reroute and	363	1% of trail tread on average		011		000									
Reconstruction 123-20015-01-03	4	feet yearly divided by 7 feet per person hour equals hours annually	0.52	Contract \$7.58		CCC	ن ا	Con	tract	\$13.00	per n	our 			
120 20010 01 00		Hiking and Travel Time	0.06	*****											
5020									DI:	 anning s	nd Si	Inenison	Hours	PMW II	0.09
ANNUAL TOTAL MATERIAL	COST AL	L PAGES:		\$117.19			I					HOUR			0.66
TOTAL EQUIP	MENT COS	STS- FROM PAGE 4		\$0	1	CHE									
					Pf	Æ⊟AI	REDI	BY:	meb			-		DATE:	2/20/02
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Establish monitoring sites to evaluate project effectiveness





Evaluating projects is a key component of adaptive management and developing best management practices





The trail management process requires:

- Classifying and prioritizing trails
- Developing trail standards
- Inventorying and assessing trails
- Determining the sustainability and maintainability of each trail
- Quantifying trail maintenance and rehabilitation cost
- Prioritizing and scheduling trail projects
- Securing labor sources, materials and tools
- Providing supervision, training and quality control

The trail management process requires:

- Performing post project inspections and inventories
- Monitoring and evaluating completed projects
- Continually adapting and improving trail maintenance and construction practices